

# STATE OF NEVADA

Department of Conservation & Natural Resources

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

#### DIVISION OF ENVIRONMENTAL PROTECTION

Colleen Cripps, Ph.D., Administrator

# FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: VERIS GOLD USA, INC.

HC 31 BOX 78 ELKO, NV - 89801

Permit Number: NS2009504

**Location:** JERRITT CANYON MINE, ELKO

HC 31 BOX 78, ELKO, NV - 89801

LATITUDE: 41.407551, LONGITUDE: -115.905510 TOWNSHIP: T34N, RANGE: R55E, SECTION: S10

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
1001	DISCHARGE LINE TO TSF-2	Internal Outfall		ELKO	NV	89801	ELKO	41.407551	1-115 905510	GROUNDWATER OF THE STATE OF NEVADA

#### General:

The Permittee, Veris Gold USA, Inc. proposes to construct a 16,000 gallon per day (gpd) package wastewater treatment plant (WWTP) to treat domestic wastewater from Jerritt Canyon Mine mill site processing, maintenance and administration buildings. The facility currently operates a 5,000 gpd package plant that requires upgrades due to an increase in the number of mine and mill personnel. Jerritt Canyon Mine consists of five underground mines and includes gold recovery and refining facilities, support facilities and exploration activities. Jerritt Canyon Mine is located approximately 50 miles north of Elko, just off of State Route 225. This facility has been in operation for over 30 years. During full scale operations, the facility estimates a working force of just over 200 at the mills and 270 in the underground operations. Using an estimated wastewater unit rate of 25 gpd/milling employee and 35 gpd/miner, the average daily flow during full staffing is approximately 15,000 gpd.

#### **Discharge Characteristics:**

The package WWTP is a pre-fabricated steel complete mix activated sludge treatment system. The extended air system is composed of an equalization basin, aeration tank, clarifier tank, sludge holding tank and the chlorination chamber. The secondary treated effluent is pumped and conveyed to a lined tailings storage facility (TSF-2) via an aboveground flexible force main. Sludge is removed from the package plant as required and disposed of in the tailings storage facility. TSF-2 is a double lined 73-acre facility providing 4.5 million tons of storage space for tailings. Because treated wastewater volumes are insignificant compared to tailings volumes, groundwater sampling is not required by this permit. There is no reuse of the treated effluent.

#### **Receiving Water:**

Discharge of secondary treated effluent will be to the tailings storage facility TSF-2. Effluent is not expected to contact waters of the State of Nevada. Operation of the tailings impoundment is administered under NDEP Bureau of Mining Regulation and Reclamation Permit NEV0000020.

#### **Summary of Changes From Previous Permit:**

This is a new 5-year groundwater discharge permit.

# WWTP Discharge Limitations Table for Sample Location 001 (Internal Outfall) To Be Reported Monthly

		ı	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Biweekly	DISCRT
Solids, total suspended	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Biweekly	DISCRT
Flow, total	Daily Maximum	<= 0.016 Million Gallons (Mgal)		Effluent Gross	001	Continuous	METER
Flow, total	30 Day Average	<= 0.016 Million Gallons (Mgal)		Effluent Gross	001	Continuous	METER
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	001	Biweekly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	001	Biweekly	DISCRT
BOD, 5-day	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Biweekly	DISCRT
BOD, 5-day	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Biweekly	DISCRT
Coliform, total general	Daily Maximum		<= 240 Most Probable Number per 100ml T (MPN/100m L)	Effluent Gross	001	Biweekly	DISCRT
Coliform, fecal general	30 Day Geometric Mean		<= 23 Most Probable Number per 100ml T (MPN/100m L)	Effluent Gross	001	Biweekly	DISCRT

## **Rationale for Permit Requirements:**

Monitoring requirements for the parameters specified in the WWTP Discharge Limitations Table for Sample Location 001 have been established to ensure that the treatment plant capacity is not exceeded and to assess the level of treatment being provided.

#### **Special Conditions:**

#### SA – Special Approvals / Conditions Table

Iten #	Description
1	Within thirty (30) days of the completion of construction of the package WWTP, the Permittee shall submit a copy of the engineer's Construction Quality Assurance (CQA) letter indicating that the package WWTP was constructed in accordance with the NDEP approved design plans. The CQA letter shall be wet stamped and signed by a Nevada Professional Engineer (P.E.).

#### Flow:

The Pollution Control Systems package WWTP is designed to treat a flow of 0.016 MGD.

#### **Corrective Action Sites:**

There are two NDEP Bureau of Corrective Actions (BCA) remediation sites within a one mile radius of this facility. BCA has indicated there are no concerns regarding the proposed permit and discharge.

#### **Wellhead Protection Program:**

The discharge to TSF-2 is within the 6000-foot buffer of two production wells that supply potable water for the mine. A wellhead protection area has not been established.

#### **Schedule of Compliance:**

SOC - Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit for review and approval two (2) copies of a new Operations and Maintenance (O&M) Manual. The O&M manual shall be prepared by a Nevada registered Professional Engineer or a Division-approved qualified person. O&M manuals prepared by a Nevada registered Professional Engineer must be stamped and signed in accordance with NAC 625.610.	9/1/2014
2	The Permittee shall submit documentation showing that a minimum Grade III Certified Operator has been contracted to oversee the operation of the Pollution Control Systems package WWTP.	9/1/2014

### **Deliverable Schedule:**

DLV- Deliverable Schedule for Reports, Plans, and Other Submittals

	Item #	Description	Interval	First Scheduled Due Date
ſ	1	Quarterly DMR Reports	Quarterly	10/28/2014
	2	Annual Report	Annually	1/28/2015

#### **Procedures for Public Comment:**

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Elko Daily Free Press**, **Reno Gazette Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. 5/14/2014, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

### **Proposed Determination:**

The Division has made the tentative determination to issue / re-issue the proposed 5-year permit.

Prepared by: **Michele Reid** Date: **4/8/2014** 

Title: Staff I Associate Engineer